

April 22, 2002

EPA Region 5 Records Ctr.



283744

Richard Boice
United States Environmental Protection Agency
77 West Jackson
Chicago, Illinois

RE: Review of Soil and Ground Water Response Actions
Midco I and Midco II, Gary, Indiana

Dear Richard:

As we have discussed on several occasions over the last few months, the Midco Remedial Corporation (MRC) has authorized ENVIRON and ERM to conduct investigations and evaluations relative to Midco I and Midco II as part of MRC's plan to move forward toward the final resolution of soil and ground water issues at both sites. The various aspects of MRC's evaluation are outlined below.

TASK DESCRIPTIONS

TASK 1. TEST PITS AT MIDCO II TO DETERMINE THE PRESENCE OF LNAPL

Despite the investigations performed to date at Midco II, there has been uncertainty as to the existence of light nonaqueous phase liquids (LNAPL) in the general vicinity of the old filter bed area. In an effort to accurately determine the existence of LNAPL in this area, ENVIRON performed two days of test pit digging at appropriate locations

The specific scope of activities consisted of:

- Excavation of test pits to a depth below the water level, documenting materials encountered, and taking photographs and/or videos;
- Collection of samples for laboratory analysis as deemed appropriate for waste characterization and remedial design purposes; and
- Reporting of findings with a discussion of the impact on the remedial activities.

TASK 2. EVALUATION OF ORGANICS OUTSIDE THE EXCLUSION ZONE AT MIDCO I

The 2001 Annual Ground Water Monitoring at the Midco I Site detected low concentrations of chlorinated and non-chlorinated organic compounds outside the Exclusion Zone, which posed carcinogenic risks above 1×10^{-5} as defined in the

Statement of Work (SOW) and/or were above their respective Maximum Contaminant Levels (MCLs) or site-specific Aquatic Water Quality Criteria (AWQC). ENVIRON will be investigating potential responses to this off-site organic contamination. Specific response actions to be investigated will include enhanced bioremediation; specifically, the use of Regenesi Bioremediation Products, Inc. (Regenesi) Hydrogen Release Compound (HRC[®]) and Oxygen Release Compound (ORC[®]), both proprietary processes, along with monitored natural attenuation.

*TASK 3. EVALUATION OF POTENTIAL OFF-SITE SOURCES OF
GROUND WATER CONTAMINATION*

Properties adjacent and upgradient of the Midco I and Midco II Sites are potential sources of ground water contamination beneath the Sites. This task is designed to identify potential off-site sources of contaminants detected in ground water samples collected upgradient and beneath the Midco I and Midco II Sites by reviewing publicly available environmental data for neighboring Sites. Information will then be evaluated to assess background concentrations and/or sources of different organic and inorganic compounds found at the Sites.

*TASK 4. EVALUATION OF WELL CORROSION, METAL-BEARING
SUSPENDED SOLIDS AND UPGRADIENT, OFF-SITE
GROUND WATER AS POTENTIAL SOURCES OF METALS IN
THE MIDCO GROUND WATER SAMPLES*

Over the years, ground water samples collected from the Midco I and Midco II Sites have contained various metals at concentrations exceeding their clean-up action levels (CALs). A cursory evaluation of the metals data suggests that some of the detected metals concentrations may be the result of: (1) corrosion of the stainless steel monitoring wells, (2) metal-bearing suspended solids, and/or (3) metals from upgradient, off-site sources. The purpose of this task is to test whether any of these potential sources are affecting the ground water at the Sites.

TASK 5. AMENABLE CYANIDE EVALUATION

One of the Midco I monitoring wells (C-10) and two of the Midco II monitoring wells (MW-1 and MW-2S) contain cyanide (CN) above the drinking water MCL of 200 µg/L. This task will involve investigation of the CN to determine whether it is free CN, also called CN amenable to chlorination because it can be oxidized by chlorine in wastewater treatment systems or complexed CN ferric salts. The reason for investigating this issue is that free CN is toxic to humans at low levels, whereas complexed CN (such as the ferric form) is not as toxic.

PRESENTATION OF RESULTS

ENVIRON and ERM will combine the results of the different tasks, with the results of prior evaluations suggested by USEPA (e.g., in-situ chemical oxidation) as part of a final review of potential response actions for the sites. The review will focus on response actions that could progress quickly and respond to the principal threat at both sites. The evaluation will include an expanded review of soil vapor extraction and alternatives for covering the two sites to provide for facilitate development or use (e.g., expansion of the Gary Chicago Airport).

PROJECT SCHEDULE

We anticipate completing the entire evaluation project in June 2002. Interim reports in either written or oral form will be made to the USEPA. The final report/presentation will be available in June 2002. The presentation will include a proposal for resolution of soil and ground water issues at both sites at that time.

If you have any questions, please contact me at 312.853.9430 (ext 214).

Sincerely,
ENVIRON International Corporation

Mark A. Travers